

CLAIMS

1. A radio communication terminal comprising a radio module for processing radio signals, a processor for processing digital signals associated with the radio signals, an audio generator adapted to generate an audio input signal to the processor in response to sound in the vicinity of the terminal, a power supply, and a power controller to control connection of the power supply to the radio modules and having a standby mode in which the radio module and processor are energised, characterised in that the power controller also energises the audio generator in the standby mode to generate an audio input to the processor, and the processor is adapted to respond to a predetermined sound by activating said terminal for communication.
2. A terminal as claimed in claim 1 in which the processor processes digital signals from the radio module during one or more successive data bursts of a radio channel not normally used for speech processing, and the processor processes said audio input between said data bursts to recognise said predetermined sound.
3. A terminal as claimed in claim 2 in which the radio channel is a paging channel.
4. A terminal as claimed in any one of the preceding claims in which said predetermined sound comprises a narrow-band sound.
5. A terminal as claimed in claim 4 in which said predetermined sound comprises a whistle.
6. A terminal as claimed in any one of the preceding claims in which the processor incorporates a sound recognition algorithm which distinguishes said predetermined sound from speech in the audio input signal.
7. A terminal as claimed in claim 6 in which the recognition algorithm is adapted to detect total energy in the audio input signal above a predetermined threshold.

8. A terminal as claimed in claim 7 in which the recognition algorithm is adapted to detect multiple energy peaks at different frequencies in the audio input signal, and to compare the energy in these peaks.
9. A terminal as claimed in any one of the preceding claims which includes a pre-shaping filter to filter out low frequency components from the audio input signal before it is processed by the processor.
10. A terminal as claimed in any one of claims 1 to 6 in which the recognition algorithm is adapted to detect low variance of the phase increment per sample in an audio block for said predetermined sound compared with speech.
11. A terminal as claimed in any one of the preceding claims in which the terminal responds to said predetermined sound by generating an audible response.
12. A terminal as claimed in any one of the preceding claims which is adapted to recognise speech commands for setting up calls from the terminal.
13. A terminal as claimed in any one of the preceding claims which is adapted for speaker phone operation.